

CLAIMS

1. A system for color measurement for a color hard copy apparatus, having a print media transport path, comprising:
  - 5 an illumination source adjacent to said path;
  - a plurality of photodetectors adjacent to said path; and
  - a test pattern on a sheet of media traveling said path, the pattern having a geometric configuration such that each of said photodetectors detects substantially discrete regions of said pattern having a single color
- 10 generated by said apparatus.
2. The system as set forth in claim 1, further comprising:
  - said photodetectors having predetermined spectral responses.
- 15 3. The system as set forth in claim 1 wherein the illumination source is broadband.
4. The system as set forth in claim 1, further comprising:
  - a white calibration target mounted within the field of view of all of said
- 20 sensors.
5. A color hard copy apparatus, having a mechanism generating a test pattern on media transported along a predetermined path through said apparatus, comprising:

adjacent said path downstream of the mechanism, a broad band illumination source mounted for illuminating said pattern; and adjacent said path downstream of the mechanism, an array of sensors mounted for detecting color properties of discrete areas of a region of the test

5      pattern having an intended uniform color generated by the mechanism.

6.      The apparatus as set forth in claim 5, comprising:  
said sensors having predetermined spectral responses.

10     7.      The apparatus as set forth in claim 5 wherein the illumination source is broadband.

8.      The apparatus as set forth in claim 5, further comprising:  
a white calibration target mounted within the field of view of all of said  
15     sensors.

9.      A method for measuring actual color produced by a color hard copy device comprising the steps of:  
a) illuminating with broad band light, a region of a color test pattern  
20     generated by the device, wherein said region has a first color generated by the device;  
b) discretely sensing actual color characteristics of individual areas of said region; and  
c) storing data representative of said color characteristics.

10. The method as set forth in claim 9, comprising the further steps of:  
printing a plurality of intended colors in addition to said first color with  
said device, and  
5 repeating steps a)-c) for each of the plurality of intended colors other  
than said first color.

11. The method as set forth in claim 9, comprising the further step of:  
prior to steps a) - c), calibrating each of said sensors using a white  
10 calibration target.